

What is claimed is:

1. A conformal load-bearing antenna assembly comprising:
a pan shaped to fit within an aircraft window opening;
an antenna element disposed within the pan; and
a connection for coupling a signal to the antenna element.
2. The antenna assembly of claim 1, wherein the antenna element comprises a stripline supported by a dielectric sheet, and at least one radiating element coupled to the stripline.
3. The antenna structure of claim 2, wherein the antenna element further comprises a front ground plane and a back ground plane, with the front ground plane forming one or more slots adjacent to the radiating element.
4. The antenna structure of claim 1, further comprising a conductive gasket positioned adjacent to the perimeter of the antenna element, electrically bonding the antenna to an aircraft fuselage and providing a pressure seal.
5. The antenna structure of claim 1, wherein the pan forms a pressure seal with the aircraft window opening.
6. The antenna structure of claim 1, further comprising a bonding strap for carrying lightning currents from the antenna structure to a fuselage of the aircraft.